Date TBD

Ms. Royann Winchester Tesoro Refining and Marketing Company 2101 E. Pacific Coast Hwy Wilmington, CA 90744

SUBJECT: A/N 474581- Rule 1105.1 Compliance Plan for FCCU Control System Constructed

and Modified After November 7, 2003

Dear Ms. Winchester:

The South Coast Air Quality Management District has reviewed your Rule 1105.1 FCCU Monitoring and Recording Plan dated October 1, 2007. This plan specifies the operating parameters to be monitored, the range of operating levels of each proposed parameter, and the frequency of monitoring and recording for the control equipment of the FCCU installed and operated before November 7, 2003 [1105.1(e)(3)(A)].

Based on our review of the information provided to us, your compliance plan is approved subject to the requirements shown below.

The operating parameters of the control equipment for the FCCU shall be monitored and recorded as follows:

Rule 1105.1 Plan: Operating Parameters and Frequency of Monitoring and Recording¹

Operating Parameters	Range of Operating Levels	Monitoring Frequency	Recording Frequency	
Dry Electrostatic Precipitator(s)				
Flue gas inlet temperature to ESP	500 – 710 °F	Continuously ²	Hourly ³	
Flue gas flow rate	55,000 – 75,000 scfm	Continuously ²	Hourly ³	
Secondary Voltage across ESP	15 – 54 kV	Continuously ²	Hourly ³	
Secondary Current across ESP	400 – 1867 amps	Continuously ²	Hourly ³	
Number of units in service	2 – 3 units	Once and when change occurs	Once and when change occurs	
Number of TR sets in service	7 – 8 sets per unit	Once and when change occurs	Once and when change occurs	
Ammonia injection rate	0-300 scfh	Continuously ²	Hourly ³	

Operating Parameters	Range of Operating Levels	Monitoring Frequency	Recording Frequency	
SO ₂ Reducing Catalyst Additives				
Type of SO ₂ reducing catalyst	DeSOx	Once and when change occurs	Once and when change occurs	
Addition rate of SO ₂ reducing catalyst	0 – 1000 lbs/day	Daily ⁴	Daily ⁴	
Pickup factor (i.e. lbs SO ₂ reduced per lbs of additives)	3.5 % wt	Once and when change occurs	Once and when change occurs	

- 1. Monitoring and recording as shown in this table shall not be required during periods of routine maintenance and malfunction of monitoring and recording devices.
- 2. "Continuously Monitoring" means monitoring at least once every 15 minutes.
- 3. "Hourly Recording" means recording at least one measurement every hour.
- 4. "Daily Monitoring" and "Daily Recording" means monitoring and recording at least one measurement every day.

If you have any questions, regarding this plan, please contact Ms. Janice West at 909-396-3763.

Sincerely,

Jay Chen Senior Manager Refinery and Waste Management Engineering & Compliance

JC:JW

cc: Ed Pupka